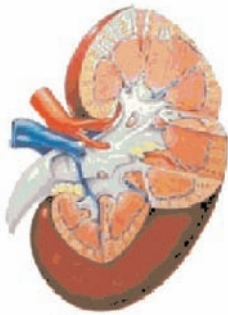




# Diabetes Mellitus Complications

Rx for Success Diabetes Mellitus discussed the types of diabetes, diagnostic criteria and general underwriting approach. This issue will look at the long-term complications of diabetes mellitus. All types of diabetes of sufficient duration can develop long-term complications of **nephropathy** (*kidney disease*), increased **atherosclerosis** (*cardiovascular disease*), **neuropathy** (*nervous system disease*), and **retinopathy** (*eye disease*). Poorly controlled diabetics will have a greater number and more rapid development of complications. Thus, the degree of complications gives some indication of long-term diabetic control.



Kidney Diagram

**Nephropathy:** This is the diabetic complication associated with the highest mortality. Diabetic kidney disease develops only in 35-45% of patients with Type 1 (*insulin-dependent diabetes mellitus*) (IDDM) and less than 20% of patients with Type 2 (*non-insulin-dependent diabetes mellitus*). In the U.S., diabetes is the leading cause of end stage renal disease requiring dialysis or transplant. Nephropathy starts with the development of microalbuminuria which is a small amount of albumin (*type of protein*) in the urine detected by the microalbumin test (*normal range 0-3 mg/dL*). This may occur as early as 5 years from the onset of diabetes. It usually takes another 5-10 years for overt proteinuria to develop (*noted by a positive random routine urinalysis or greater than 300 mg of albumin on a 24-hour urine collection*). The average time from overt proteinuria to needing dialysis is only 5-6 years. The risk of cardiovascular disease is much greater in a diabetic with renal disease vs. no renal disease. Hypertension accelerates the kidney disease. The presence of persistent protein in the urine of a known diabetic would have additional rating and may call for a decline on an individual basis. Survivorship policies would be highly rated.



Heart Exterior Diagram

**Cardiovascular:** Atherosclerosis is implicated in 80% of all diabetic mortality. Coronary artery disease develops at a younger age in diabetics (*especially if they also have renal disease*). Also, the usual protective effect of female gender is lost. Diabetics more often have atypical angina and the mortality rate is higher following myocardial infarction than in non-diabetics. The total rating for coronary artery disease in a diabetic will range from high substandard to a decline on an individual basis.

*This material is intended for insurance informational purposes only and is not personal medical advice for clients. This marketing material includes an expiration date and use of this material must be discontinued as of the expiration date.*

**FOR INTERNAL USE ONLY. NOT FOR USE WITH THE PUBLIC.**

**INSERT YOUR  
LOGO HERE!**



**Prudential**

©2007 The Prudential Insurance Company of America  
751 Broad Street, Newark, NJ 07102-3777  
Rx013 IFS-A120680 Ed. 06/06 Exp. 12/07

